

IN THE CLAIMS:

Please cancel Claim 18, without prejudice or disclaimer of subject matter.

Please amend Claims 8, 10, 15, 17, and 22, as indicated below. The following is a complete listing of the claims, and replaces all earlier versions and listings.

1. (Previously Presented) A method of inserting a message into digital data representative of physical quantities, the message including ordered symbols, said method comprising the steps of:

segmenting the data into regions; and

associating at least one region with each symbol to be inserted, wherein, for each region into which a symbol in question is to be inserted, said method includes the steps of:

determining a pseudo-random function, from a key which depends on an initial key and on a length of the message,

modulating the symbol in question by the previously determined pseudo-random function in order to supply a pseudo-random sequence, and

adding the pseudo-random sequence to the region in question,  
wherein the dependence of the key on the length of the message is provided by a dependence of the key on:

the number of times the symbol to be inserted has already been inserted into other regions, and

the ranking of the symbol among the ordered symbols.

2. (Canceled)

3. (Previously Presented) A method according to Claim 1, further comprising the step of transforming the digital data by a reversible transformation.

4. - 7. (Canceled)

8. (Currently Amended): A ~~device programmed computer~~ for inserting a message into digital data representative of physical quantities, the message including ordered symbols, ~~said device~~ ~~the programmed computer~~ comprising:

means for segmenting the data into regions; and

means for associating at least one region with each symbol to be inserted,  
wherein said device further includes:

means for determining a pseudo-random function, for each region into which a symbol in question is to be inserted, from a key which depends on an initial key and on a length of the message,

means for modulating the symbol in question by the previously determined pseudo-random function in order to supply a pseudo-random sequence, and

means for adding the pseudo-random sequence to the region in question,

wherein said means for determining a pseudo-random function is configured in such a way that a dependence of the key on the length of the message is provided by a dependence of the key on:

the number of times the symbol to be inserted has already been inserted into other regions, and

the ranking of the symbol among the ordered symbols.

9. (Canceled)

10. (Currently Amended): A device programmed computer according to Claim 8, further comprising means for prior transformation of the digital data by a reversible transformation.

11. - 14. (Canceled)

15. (Currently Amended): A device programmed computer according to Claim 8, wherein said steps of means for segmenting and associating, and the steps of said means for determining, modulating, and adding are performed by:

a microprocessor,

a read-only memory including a program for processing the data, and

a random-access memory including registers suitable for recording variables modified during running of the program.

16. (Canceled)

17. (Currently Amended): An A computerized apparatus for processing a digital image in order to insert a message into digital data representative of physical quantities, the message including ordered symbols, the apparatus comprising means suitable for implementing the method according to claim 1 a microprocessor programmed to:

segment the data into regions; and

associate at least one region with each symbol to be inserted, wherein, for each region into which a symbol in question is to be inserted, the microprocessor is programmed to:

determine a pseudo-random function, from a key which depends on an initial key and on a length of the message,

modulate the symbol in question by the previously determined pseudo-random function in order to supply a pseudo-random sequence, and

add the pseudo-random sequence to the region in question,

wherein the dependence of the key on the length of the message is provided by a dependence of the key on:

a number of times the symbol to be inserted has already been inserted into other regions, and

a ranking of the symbol among the ordered symbols.

18. (Canceled)

19. (Previously Presented) A storage medium storing a computer-readable program for implementing a method for inserting according to Claim 1.

20. (Previously Presented) A storage medium according to Claim 19, wherein said storage medium is detachably mountable on a device for inserting a message that includes ordered symbols into digital data representative of physical quantities, and wherein the device comprises:

means for segmenting the data into regions;

means for associating at least one region with each symbol to be inserted, said device further including:

means for determining a pseudo-random function, for each region into which a symbol in question is to be inserted, from a key which depends on an initial key and on a length of the message,

means for modulating the symbol in question by the previously determined pseudo-random function in order to supply a pseudo-random sequence, and

means for adding the pseudo-random sequence to the region in question,

wherein said means for determining a pseudo-random function is configured in such a way that a dependence of the key on the length of the message is provided by a dependence of the key on:

the number of times the symbol to be inserted has already been inserted into other regions, and

the ranking of the symbol among the ordered symbols.

21. (Previously Presented) A storage medium according to Claim 19, wherein said storage medium is a floppy disk or a CD-ROM.

22. (Currently Amended): A computer-readable storage medium storing program product embodying a computer program with executable instructions for causing a computer to perform a method of inserting according to Claim 1 a message into digital data representative of physical quantities, the message including ordered symbols, wherein the method comprises:

segmenting the data into regions; and

associating at least one region with each symbol to be inserted, wherein, for each region into which a symbol in question is to be inserted, said method includes the steps of:

determining a pseudo-random function, from a key which depends on an initial key and on a length of the message,

modulating the symbol in question by the previously determined pseudo-random function in order to supply a pseudo-random sequence, and

adding the pseudo-random sequence to the region in question,

wherein the dependence of the key on the length of the message is provided by a dependence of the key on:

a number of times the symbol to be inserted has already

been inserted into other regions, and

a ranking of the symbol among the ordered symbols.

23. - 26. (Canceled)